



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,180	12/02/2003	Simon Robert Walmsley	PEA15US	4589

24011 7590 11/25/2009
SILVERBROOK RESEARCH PTY LTD
393 DARLING STREET
BALMAIN, 2041
AUSTRALIA

EXAMINER

TRUVAN, LEYNNA THANH

ART UNIT	PAPER NUMBER
----------	--------------

2435

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

11/25/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

pair@silverbrookresearch.com
patentdept@silverbrookresearch.com
uscorro@silverbrookresearch.com

Office Action Summary	Application No. 10/727,180	Applicant(s) WALMSLEY ET AL.	
	Examiner Leynna T. Truvan	Art Unit 2435	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-3 are pending.

Response to Arguments

2. Applicant's arguments filed 7/8/09 have been fully considered but they are not persuasive.

Applicant argues that does not disclose the subject matter of amended independent claim 1, 2, and 3 for Gilbert only discloses storage in a single chip and Matumoto specifically discloses that each entity A-D stores its own version of the secret algorithm and cryptokey defined by that entities unique identifier and is silent as to where and how secret algorithm and cryptokey is stored. Gilbert discloses the symmetrical cryptography where two entities share exactly the same information in particular a secret key. This suggests the amended subject matter "identical secret information in each chip" since there is two entities where each entity includes a chip (col.1, lines 33-35). Therefore, the chip of the two entities reads on the claimed plurality of other chips. However, Gilbert does not suggest this plurality of chips storing the same information in the flash memory. Thus, Matumoto discloses a shared cryptokey generation system provided with a secret algorithm generation apparatus which, under requirements determined among a plurality of entities sharing a cryptokey (col.2, lines 42-46 and col.4, lines 23-27). The plurality of entities and a plurality of cryptokey generation mean which have memories which store at least the secret algorithms (col.2, lines 52-55 and col.4, lines

43-55). Matumoto discloses the procedure for generating the shared cryptokeys may be performed internally in the IC cards, etc., in addition to being performed by simply inputting the identifiers, so the burden of work of the entities for sharing the cryptokeys is cut down tremendously (col.5, lines 58-63). Therefore, it would have been obvious for a person of ordinary skills in the art to at the time the invention was made to combine Gilbert and Matumoto to teach the same secret information is stored in the flash memory of a plurality of the other chips because the burden of work of the entities for sharing the cryptokeys is cut down tremendously (Matumoto - col.2, lines 42-46 and col.4, lines 23-27 and col.5, lines 58-63).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert, et al. (US 7,165,177), and further in view of Matumoto, et al. (US 5,016,276).

As per claim 1:

Gilbert discloses a plurality of integrated circuits, each of the integrated circuits (col.1, lines 13-14 and col.4, lines 14-15) comprising a processor and flash memory (col.5, lines 39-40 and col.7, lines 41-53), and including code for running identical

software processes, wherein each of the integrated circuits also includes identical secret information (**col.1, lines 33-35**) used by the software process (**col.2, lines 4-10 and col.6, lines 11-14**; secret information can broadly interpret as data that is protected and secure such that may involve authentication or verification process. Gilbert's secret key, authentication data, or certificate value (col.3, lines 1-28) which is referring to the claimed secret information.), the identical secret information in each chip being located in a different location in the flash memory relative to locations *[in which the same secret information is stored in the flash memory of a plurality of the other chips]*. (**col.6, lines 18-22 and col.7, lines 55-65**)

Gilbert discloses the invention that provides hardwired logic or microprocessor integrated circuit chips with protection against fraud (col.1, lines 10-15). Gilbert discusses passing directly over each bit of the non-volatile memory by the number of bits determines to prevent any attempt at fraudulent replaying and the number of m is the same as the number of bits in the certificate S where the masked certificate S does not reveal any information on the certificate (**col.6, lines 18-67 and col.7, lines 1-25**). Gilbert teaches an EEPROM which is a type of nonvolatile memory and that a flash memory is also a type of nonvolatile memory. Although, Gilbert discloses the secret information in each chip being located in a different location in the EEPROM (flash) memory, but did not go into details in which the same secret information is stored in the (flash) memory of a plurality of the other chips.

Matumoto discloses a shared cryptokey generation system provided with a secret algorithm generation apparatus which, under requirements determined among a

plurality of entities sharing a cryptokey (col.2, lines 42-46 and col.4, lines 23-27). The plurality of entities and a plurality of cryptokey generation means which have memories which store at least the secret algorithms (col.2, lines 52-55 and col.4, lines 43-55). Matumoto discloses the procedure for generating the shared cryptokeys may be performed internally in the IC cards, etc., in addition to being performed by simply inputting the identifiers, so the burden of work of the entities for sharing the cryptokeys is cut down tremendously (col.5, lines 58-63).

Therefore, it would have been obvious for a person of ordinary skills in the art to at the time the invention was made to combine Gilbert and Matumoto to teach the same secret information is stored in the flash memory of a plurality of the other chips because the burden of work of the entities for sharing the cryptokeys is cut down tremendously (Matumoto - col.2, lines 42-46 and col.4, lines 23-27 and col.5, lines 58-63).

As per claim 2: see Gilbert on col.6, lines 18-22 and col.7, lines 55-65; discussing a plurality of integrated circuits according to claim 1, wherein the code on each integrated circuit is such that the software process of each chip knows the location in memory via which the secret information is accessible.

As per claim 3: Gilbert discusses a method of manufacturing a plurality of the integrated circuits of claim 2, including the steps of: manufacturing a plurality of physical integrated circuits; and **(col.5, lines 21-23)** injecting, into the flash memory of each of the integrated circuits: code for running a software process; and the same secret information (Matumoto - col.5, lines 58-63); wherein the secret information is positioned in relatively different locations of the flash memories of the integrated circuits and the

code on each integrated circuit is such that the software process of each integrated circuit knows the location in memory via which the secret information is accessible on that integrated circuit. **(col.6, lines 18-22 and col.7, lines 55-65)**

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leynna T. Truvan whose telephone number is (571) 272-3851. The examiner can normally be reached on Monday - Thursday (7:00 - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. T. T./
Examiner, Art Unit 2435
/Kimyen Vu/
Supervisory Patent Examiner, Art Unit 2435